

## Week of August 19 to August 25 DO Summary

Delivered luminosity and operating efficiency

Delivered: 2.8pb<sup>-1</sup>

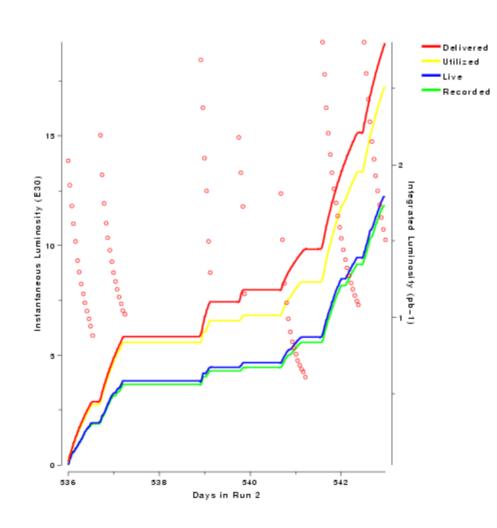
Recorded: 1.8pb<sup>-1</sup> (~65%)

### Data taking efficiency

- front-end busy down to 1%
- no major hardware/software problems
- during weekend our "to tape" efficiency was stable at ~80%
- different problems caused 1-2 hours downtimes
  - ▲ TCC memory overflow
  - ▲ L3 supervisor crash
  - ▲ L2 processor crash
  - ▲ special runs downloads

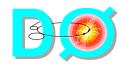
#### Accelerator halo

- reasonable except Thursday/Friday stores
- Beam position
  - stable within 0.3mm from the detector center



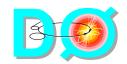
## **DO Detectors Status**

- Luminosity detector
  - Stable operation
  - Estimated error is 10%
- Silicon detector
  - Power supplies are running well
  - Noises stable: ~94% of channels are in operation
- Calorimeter
  - Stable
  - \* Calibration of Level 1 trigger energy scale
  - BLS boards modifications are needed for improvement of low energy jet triggers thresholds
- Muon
  - Stable operation
  - ◆ One PDT A layer chamber failed: ~8% of acceptance
- Forward proton detector
  - inserting pots during most stores



# Data taking and triggering

- Running physics trigger list 8.2 since last Thursday
  - designed for higher luminosities
  - keep high pt triggers unprescaled at any luminosity
  - addition of new tools which became available recently
    - ▲ tracking at the Level 3 trigger
- Typical trigger/DAQ rates
  - L1 trigger 0.25kHz
  - L2 trigger 0.15kHz
  - L3 trigger (to tape) ~40 Hz
- Total number of events collected over last week
  - 6 mln
- Farms reconstruction speed is improved with new V11.11
  - processing about 4 mln events per week
- Summary report this week from Darien Wood, chair of the DO Trigger Board



# Wednesday Access

- Tuesday
  - power distribution modifications for extra Level 3 trigger nodes
- Wednesday
  - two major jobs
    - ▲ fix A layer muon PDT (detector partly open)
    - ▲ modifications of the calorimeter BLS boards (to stabilize output signals to the Level 1 trigger cards)
  - multiple minor jobs (spare LVPS, etc.)
  - plan to start at 6am and be ready for S&S by 5am Thursday



## Summary

- D0 Collaboration is progressing with physics data taking
  - no major problems with detectors/electronics/triggers/DAQ
  - all detectors are in readout
  - trigger list 8.20 is running on-line
    - ▲ collected ~6 mln. events during last week

 Planning for Supervised Access and Wednesday and collisions on Thursday day shift